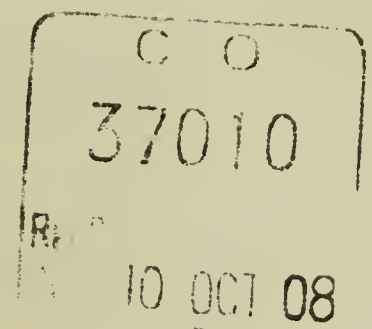


London School of Tropical
^{Medicine}
Federated Malay States.



THE MEDICAL REPORT

FOR THE

STATE OF SELANGOR,

1907.

RETURN OF THE STATISTICS OF POPULATION OF SELANGOR
FOR THE YEAR 1907.

	Europeans.	Eurasians.	Chinese.	Malays.	Indians.	Others.	Total.
Number of Inhabitants on the 31st December, 1906 ...	3,719		169,931	61,472	44,744	3,753	283,619
„ Births during the year 1907	73		796	1,625	292	402	3,188
„ Deaths „ „	29		5,704	1,340	2,626	478	10,177
„ Immigrants „ „	1,927		49,172	13,782	30,627	1,168	96,676
„ Emigrants „ „	1,457		24,356	8,601	11,997	253	46,664
„ Inhabitants on the 31st December, 1907 ...	4,233		189,839	66,938	61,040	4,592	326,642
Increase	514		19,908	5,466	16,296	839	43,023
Decrease							

METEOROLOGICAL RETURN OF KUALA LUMPUR FOR THE YEAR 1907.

			Temperature.						Rainfall.*		Winds.	
			Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.
January			148.7	52.4	89.3	71.1	18.2	80.6	3.05	80	Calm	Not recorded
February			149.4	52.0	90.3	70.9	19.4	80.3	4.02	78	Calm	
March			143.7	52.6	90.5	71.5	19.0	80.2	9.21	80	S.W.	
April			145.3	52.5	91.1	71.6	19.5	81.0	12.69	78	Calm	
May			149.2	51.5	90.5	71.8	18.7	80.8	7.55	79	Calm	
June			147.6	52.6	90.0	71.1	18.9	80.3	7.44	78	S.W.	
July			147.1	52.3	90.4	71.3	19.1	80.5	3.37	79	S.W.	
August			150.8	51.7	90.3	70.6	19.7	80.9	0.72	77	S.W.	
September			147.8	52.5	90.7	70.9	19.8	80.7	6.69	79	S.W.	
October			141.3	52.5	89.5	70.7	18.8	79.4	12.38	83	S.W.	
November			149.8	52.6	89.3	71.1	18.2	80.3	7.73	78	S.W.	
December			137.0	52.9	89.3	70.2	19.1	78.9	18.92	84	S.W.	
Mean			146.4	52.3	90.1	71.1	19.0	80.3	7.81	79	S.W.	

* Total rainfall, 93.77 inches.

RETURN OF DISEASES AND DEATHS IN 1907 AT
ALL HOSPITALS IN SELANGOR.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
GENERAL DISEASES.					
Small-pox	1	1	1	2	
Chicken-pox ... ..	...	9	...	9	
Measles ... ..	...	5	...	5	
Typhus					
Dengue	1	49	...	50	3
Influenza					
Plague					
Mumps ... ..	...	11	...	11	
Diphtheria ... ..	...	2	1	2	
Febricula ... ..	...	12	...	12	
Enteric Fever	4	36	18	40	1
Cholera					
Dysentery	77	1,185	583	1,262	71
Yellow Fever					
Beri-beri	222	1,633	266	1,855	322
Malarial Fever—					
(a) Intermittent—	18	1,546	65	1,564	44
Quotidian	78	1,211	239	1,289	89
Malig. Tertian	25	1,769	175	1,794	83
Quartan	5	118	7	123	3
Irregular ... ..	...	1,157	147	1,157	51
Type undiagnosed	61	2,066	50	2,127	59
(b) Remittent					
(c) Pernicious R.—	8	2	2	10	
Malarial Cachexia	10	10	...	20	
Phagedæna—					
(a) Sloughing	5	9	3	14	2
(b) Hospital gangrene ... ..	...	10	3	10	
Erysipelas ... ..	...	11	1	11	1
Carried forward ...	515	10,852	1,561	11,367	729

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.						* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
							Admis- sions.	Deaths.		
<i>Brought forward</i> ...						515	10,852	1,561	11,367	729
GENERAL DISEASES---(cont.)										
Pyæmia	...	...	...	...	...	...	3	2	3	
Septicæmia	...	...	...	...	...	...	6	4	6	
Tetanus	...	...	...	...	...	...	3	2	3	
Tubercle	...	...	...	...	...
Leprosy—	...	...	...	...	...	157	113	60	270	168
(a) Tubercular	...	...	...	...	...	...	16	...	16	2
(b) Anæsthetic	...	...	...	...	...	...	15	...	15	2
Yaws	...	...	...	...	...
Syphilis—										
(a) Primary	...	...	...	...	...	21	283	4	304	14
(b) Secondary	...	...	...	...	...	9	196	2	205	19
(c) Inherited	...	...	...	...	...	15	298	20	313	23
Gonorrhœa	...	...	...	...	...	29	236	2	265	13
Hydrophobia	...	...	...	...	...
Scurvy	...	...	...	...	...
Alcoholism	...	...	...	...	...	2	33	...	35	3
Delirium Tremens	...	...	...	...	...
Rheumatic Fever	...	...	...	...	...	...	1	1	1	
Rheumatism	...	...	...	...	...	39	792	6	831	62
Gout	...	...	...	...	...	...	2	...	2	
New Growths, non-malignant	...	...			...	1	26	2	27	3
Do. malignant	...	...			...	1	18	6	19	1
Rickets	...	...	...	...	...
Anæmia	...	...	...	...	...	34	574	129	608	44
Myxœdema	...	...	...	...	...	...	1	...	1	
Diabetes mellitus	...	...	...	...	...	...	3	1	3	
Do. insipidus	...	...	...	...	...	...	1	...	1	
Debility	...	...	...	...	...	22	441	47	463	9
Other Diseases	...	...	...	...	...	...	35	8	35	
<i>Carried forward</i> ...						845	13,948	1,857	14,793	1,092

* i.e., the year previous to that for which the Return is made.

† “Total cases treated” will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	845	13,948	1,857	14,793	1,092
LOCAL DISEASES.					
NERVOUS SYSTEM.					
Sub-Section 1---					
Neuritis ... ..	...	9	...	9	1
Meningitis ... ..	...	12	9	12	
Myelitis	4	11	2	15	4
Hydrocephalus					
Encephalitis					
Abscess of brain					
Congestion of brain					
Sub-Section 2---					
Apoplexy ... ..	...	7	4	7	
Paralysis	32	60	26	92	7
Bed-sore					
Chorea					
Epilepsy	1	10	1	11	
Neuralgia	1	19	...	20	1
Hysteria ... ..	...	4	...	4	
Sub-Section 3---					
Idiocy ... ..	...	1	1	1	
Mania	36	55	20	91	26
Melancholia	26	93	32	119	50
Dementia	11	6	2	17	9
Delusional Insanity	2	3	...	5	
Other Diseases of the System	23	30	2	53	
EYE.					
Conjunctiva---					
Conjunctivitis	2	93	...	95	12
Cornea---					
Keratitis ... ..	...	21	2	21	1
Ulceration	6	66	6	72	10
Opacity	1	3	...	4	
<i>Carried forward</i> ...	990	14,451	1,964	15,441	1,213

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	990	14,451	1,964	15,441	1,213
LOCAL DISEASES—(cont.)					
EYE—(cont.)					
Schlerotic—					
Staphyloma... ... ... ...	...	2	...	2	1
Iris—					
Iritis 	1	23	...	24	2
Glaucoma 					
Hypopyon 					
Lens—					
Cataract 	9	19	...	28	14
Eyelids—					
Entropion 					
Other Eye Diseases 	52	55	5	107	
EAR.					
Inflammation ... ... ... ...	...	3	...	3	
Other Ear Diseases ... ... ... ...	...	23	...	23	
NOSE.					
Inflammation ... ... ... ...	...			
Other Nose Diseases ... ... ... ...	...	3	...	3	
CIRCULATORY SYSTEM.					
Membranes—					
Pericarditis... ... ... ...	...	6	3	6	
Endocarditis 					
Valvular Diseases 	4	40	16	44	
Muscular Substance—					
Hypertrophy 					
Dilatation 					
Other Diseases of the System 	2	125	8	127	3
RESPIRATORY SYSTEM.					
Larynx—					
Laryngitis ... ... ... ...	...	11	...	11	
<i>Carried forward</i> ...	1,058	14,761	1,996	15,819	1,233

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	1,058	14,761	1,996	15,819	1,233
LOCAL DISEASES—(<i>cont.</i>)					
RESPIRATORY SYSTEM—(<i>cont.</i>)					
Bronchi—					
Bronchitis	16	396	5	412	16
Asthma	2	57	2	59	3
Lung—					
Congestion					
Hæmoptysis ... ..	...	2	1	2	
Pneumonia	3	364	196	367	11
Gangrene ... ..	...	8	8	8	
Phthisis	20	527	257	547	43
Emphysema ... ..	...	2	2	2	
Pleura—					
Pleurisy	6	153	10	159	3
Empyema ... ..	...	23	16	23	2
Other Diseases of the System	2	53	...	55	
DIGESTIVE SYSTEM.					
Mouth—					
Stomatitis	1	10	...	11	
Dental Periostium—					
Gum-boil ... ..	...	4	...	4	
Fauces—					
Tonsillitis ... ..	...	11	...	11	1
Stomach—					
Gastritis ... ..	...	24	2	24	3
Dyspepsia	2	348	5	350	4
Intestines—					
Enteritis ... ..	...	1	1	1	
Sprue ... ..	...	15	5	15	1
Hernia... ..	1	17	...	18	2
Constipation ... ..	...	93	...	93	1
Diarrhœa	35	1,700	459	1,735	55
<i>Carried forward</i> ...	1,146	18,569	2,965	19,715	1,378

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	1,146	18,569	2,965	19,715	1,378
LOCAL DISEASES—(cont.)					
DIGESTIVE SYSTEM—(cont.)					
Rectum and Anus—					
Hemorrhoids ... ..	...	46	...	46	1
Liver—					
Hepatitis	1	10	1	11	
Abscess Liver	1	7	2	8	2
Cirrhosis	9	125	39	134	7
Congestion Liver	1	1	...	2	
Jaundice	2	23	4	25	2
Peritoneum—					
Peritonitis ... ..	...	9	6	9	
Ascites	2	11	5	13	
Other Diseases of the System	8	89	12	97	2
LYMPHATIC SYSTEM.					
Spleen—					
Splenitis	5	220	3	225	27
Bubo	2	207	1	209	19
Lymphangitis ... ..	...	4	1	4	
Elephantiasis ... ..	...	7	...	7	
Other Diseases of the System	2	18	3	20	2
URINARY SYSTEM.					
Kidney—					
Acute Nephritis	3	26	12	29	2
Bright's Disease	10	172	38	182	11
Hæmaturia ... ..	...	2	1	2	
Chyluria ... ..	...	...	...	...
Bladder—					
Cystitis ... ..	...	16	1	16	1
Calculus	1	5	1	6	
Other Diseases of the System ... ..	...	27	5	27	
<i>Carried forward</i> ...	1,193	19,594	3,100	20,787	1,454

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	1,193	19,594	3,100	20,787	1,454
LOCAL DISEASES—(<i>cont.</i>)					
GENERATIVE SYSTEM.					
Urethra—					
Stricture ... ..	...	14	1	14	
Prepuce—					
Phimosis	4	64	...	68	2
Paraphimosis ... ..	...	18	...	18	1
Penis—					
Soft Chancre	11	308	...	319	14
Scrotum—					
Sloughing Scrotum ... ..	...	14	...	14	2
Tunica Vaginalis—					
Hydrocele ... ..	...	16	...	16	1
Testicle—					
Orchitis ... ..	...	31	1	31	1
Epididymitis	1	16	...	17	
Other Diseases (male)	1	53	1	54	4
Uterus—					
Metritis ... ..	...	2	...	2	
Uterine Displacements ... ..	...	2	...	2	
Amenorrhœa ... ..	...			
Dysmenorrhœa ... ..	...			
Menorrhagia ... ..	...			
Leucorrhœa ... ..	...			
Other Diseases (female)	14	86	8	100	3
ORGANS OF LOCOMOTION.					
Bones—					
Ostitis	1	9	...	10	
Periostitis ... ..	...	17	...	17	2
Caries	1	6	2	7	
Necrosis	2	17	...	19	
<i>Carried forward</i> ...	1,228	20,267	3,113	21,495	1,484

* *i.e.*, the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	1,228	20,267	3,113	21,495	1,484
LOCAL DISEASES—(cont.)					
ORGANS OF LOCOMOTION—(cont.)					
Joints—					
Synovitis	7	57	2	64	7
Ankylosis ... ..	...	15	2	15	3
Spine—					
Caries Spine ... ..	...	3	1	3	
Curvature Spine ... ..	...	4	2	4	1
Muscles—					
Myalgia ... ..	...	1	...	1	
Other Diseases	16	39	...	55	2
CONNECTIVE TISSUE.					
Cellulitis	1	29	4	30	4
Abscess	18	375	12	393	23
Gangrene	5	19	12	24	1
Other Diseases ... ..	...	1	...	1	
SKIN.					
Eczema	2	102	...	104	5
Psoriasis	2	8	...	10	
Herpes... ..	...	2	...	2	
Do. Zoster... ..	...	3	...	3	1
Ulcer	142	999	20	1,141	274
Boil ... ..	...	14	...	14	
Carbuncle	3	25	2	28	3
Onychia ... ..	...	3	...	3	
Whitlow ... ..	...	1	...	1	
Other Diseases	8	87	...	95	6
GENERAL INJURIES.					
Burns and Scalds	1	29	5	30	4
Sunstroke ... ..	...	1	...	1	
Multiple Injury	1	4	...	5	
Starvation ... ..	...	8	5	8	1
Shock ... ..	...	2	2	2	
<i>Carried forward</i> ...	1,434	22,098	3,182	23,532	1,819

* i.e., the year previous to that for which the Return is made.
† “Total cases treated” will, of course, include those remaining in Hospital at the end of the previous year.
‡ The figures in this column to be carried on to the next year’s Return.

Diseases.						* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
							Admis- sions.	Deaths.		
<i>Brought forward</i> ...						1,434	22,098	3,182	23,532	1,819
LOCAL INJURIES.										
Burns and Scalds						1	76	...	77	3
Wounds						26	531	18	557	18
Sprains						3	36	...	39	2
Dislocations ... ..						...	17	...	17	2
Fractures, simple						4	80	10	84	9
Do. compound... ..						5	33	4	38	3
Other Injuries						2	150	3	152	5
MALFORMATIONS ... ..						...	6	1	6	
SURGICAL OPERATIONS.										
Surgical Operations						42	635	1	677	3

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

Diseases.	* Remaining in Hospital at end of 1906.	Yearly Total.		† Total Cases Treated.	‡ Remaining in Hospital at end of 1907.
		Admis- sions.	Deaths.		
<i>Brought forward</i> ...	1,520	23,716	3,223	25,236	1,866
PARASITES.					
Distomum Sinense					
Tœnia Solium ... ..	...	3	...	3	
Ascaris Lumbricoides	2	71	...	73	3
Anchylostomum Duodenale	6	346	129	352	41
Oxyuris Vermicularis ... ..	...	1	...	1	
Filaria Medimensis ... ..	...	9	...	9	
Acarus Scabiei	10	245	...	255	9
Tinea Circinata ... ..	...	13	...	13	3
Other Parasites ... ..	...	16	...	16	2
UNDER OBSERVATION	10	291	3	301	18
TOTAL ...	1,548	24,711	3,355	26,259	1,942

* *i.e.*, the year previous to that for which the Return is made.
† “Total cases treated” will, of course, include those remaining in Hospital at the end of the previous year.
‡ The figures in this column to be carried on to the next year’s Return.

FEDERATED MALAY STATES.

STATE OF SELANGOR.

ANNUAL REPORT ON THE MEDICAL DEPARTMENT FOR THE YEAR 1907.*

VITAL STATISTICS.

The estimated population for the year 1907 is 326,642, an increase of 43,023 over the previous year.

These figures are by no means correct, as no record is kept of immigrants and emigrants by land.

There were 3,188 births registered during the year, giving a birth-rate of 9.75 per mille per annum based on the above estimated population.

The deaths registered amounted to 10,177, giving a death-rate of 31.15 per mille per annum.

The system of registration of births and deaths is satisfactory as a record of these events, but as to giving the true cause of death it is fallacious.

COMPARATIVE TABLE OF POPULATION, BIRTH-RATE AND DEATH-RATE FOR THE LAST THREE YEARS.

				Population.		Birth-rate.		Death-rate.
1905	...	...	...	252,502	...	11.31	...	26.75
1906	...	...	...	283,619	...	9.94	...	29.27
1907	...	...	...	326,642	...	9.75	...	31.15

METEOROLOGICAL CONDITIONS.

The greatest rainfall was registered at Kuala Kubu, viz., 117.88 inches, and the lowest at Sabak Bernam, 47.77 inches. Kuala Kubu once more heads the list as having the heaviest rainfall. At the General Hospital, Kuala Lumpur, the rainfall registered for the year was 93.77 inches as against 86.74 inches last year.

The mean maximum temperature was 90°.1 F., and the mean minimum, 71°.1 F.

The mean average temperature for the year was 80°.3 F., as against 80°.4 F. the previous year.

NUMBER OF PATIENTS TREATED IN ALL HOSPITALS.

The number admitted to the 17 hospitals in Selangor during the year was 24,076, and the total treated 25,602.

The percentage of deaths for all cases treated in the State hospitals during the year was 13.10, representing 3,354 deaths. There has been an increase in the death-rate in all the hospitals. The death-rate of 13.10 per cent. is the highest for many years.

The following comparative table shows the number of patients treated, with the number of deaths and case-mortality during the last five years :

Year.				No. treated.		No. of deaths.		Percentage.
1903	...	...	...	14,425	...	1,872	...	12.97
1904	...	...	...	14,319	...	1,534	...	10.71
1905	...	...	...	16,382	...	1,856	...	11.73
1906	...	...	...	18,963	...	2,428	...	12.80
1907	...	...	...	25,602	...	3,354	...	13.10

It will be observed that 6,639 more patients were treated this year than last. This increase is largely due to the influx of Tamil and Chinese coolies. This increase has been most marked at the District Hospital, Kuala Lumpur, General Hospital, Kuala Lumpur, and Klang Hospital.

SPECIAL DISEASES.

ZYMOTIC DISEASE.

DIPHTHERIA.—The occurrence of three cases of diphtheria in Kuala Lumpur has been the most noticeable feature of the year. This disease has hitherto been unknown in the State.

* Returns not printed.

Two of the cases were Europeans, one of whom died. They were both treated in the European hospital. The third case was in a Chinese girl, the daughter of a wealthy Chinaman. This case was treated in her own home. There is at present no isolation ward or hospital in the State for treating Europeans suffering from any dangerous, infectious or contagious disease.

No causal relation could be traced between the three cases, and the origin of infection of all three is wrapped in mystery. A possible explanation is that the disease must have been in existence amongst the natives in the State previously, though not coming under the observation of the Medical Officers, and that the poison has been recently disturbed and disseminated in the dust thrown up by motor cars.

CHOLERA.—An outbreak of cholera occurred on Lapan Utan Estate, Kuala Selangor, amongst the coolies, in October. There were in all 12 cases and 11 deaths. The cause of this outbreak was distinctly traced to a cooly who had just arrived from India by the s.s. “Teesta.” He developed the disease on the afternoon of his arrival at Port Swettenham, and must have been infected on the voyage from probably clothing or some other legacy left to him by someone who died from cholera in India. This shows the necessity of having coolies’ clothing, etc., subjected to disinfection at the port of embarkation.

SMALL-POX.—Two cases of small-pox were treated during the year—one, a Chinaman, at the Infectious Disease Ward, Kuala Lumpur, and the other, a Tamil, at the Quarantine Station, Port Swettenham. The latter was found suffering from the disease on his arrival at Port Swettenham by the s.s. “Perak.” All coolies not showing good vaccination marks were vaccinated on their arrival at Port Swettenham before proceeding to the various estates.

PLAGUE.—No case of plague occurred during the year.

CHICKEN-POX AND MEASLES.—A few cases came under observation during the year.

PREVAILING DISEASES.

The following diseases were responsible for the largest proportion of sickness and mortality:

Disease.	No. treated.		No. of deaths.		Percentage of deaths.	
	1906.	1907.	1906.	1907.	1906.	1907.
Beri-beri	1,896	1,887	365	374	19.25	19.81
Malarial fever	3,397	7,687	348	681	10.24	8.86
Pulmonary disease	948	1,442	262	500	27.63	34.67
Dysentery	1,224	1,240	437	505	35.70	40.72
Venereal disease	942	1,064	23	28	2.44	2.63
Diarrhoea	910	1,168	344	243	37.80	20.80

BERI-BERI.—The number of beri-beri cases treated in the various hospitals, with the number of deaths and death-rate, and compared with the four previous years, was as follows:

Year.	Cases treated.		Deaths.		Mortality.
1903	1,912	...	351	...	18.35
1904	2,083	...	326	...	15.65
1905	2,215	...	330	...	14.89
1906	1,896	...	365	...	19.25
1907	1,887	...	374	...	19.81

The number of cases treated was less than in any of the four previous years, but the number of deaths and the case-mortality was slightly higher.

The disease appears to have been of a very fatal type at Kuala Kubu and Sungei Besi, where 114 cases were treated with 41 deaths, and a case-mortality of 35.96 per cent., and 103 cases with 34 deaths, and a case-mortality of 33.00 per cent., respectively.

MALARIAL FEVER.—There has been again a large increase of cases of malaria admitted to hospital as shown by the following figures:

Year.	Cases treated.		Deaths.		Mortality.
1904	2,008	...	114	...	5.67
1905	2,109	...	173	...	8.20
1906	3,397	...	348	...	10.24
1907	7,687	...	681	...	8.86

Another noticeable feature of the year is the marked increase of malaria amongst Europeans resident in Kuala Lumpur and who undoubtedly contracted the disease in Kuala Lumpur. It has been particularly prevalent amongst the residents on the Federal Hill and those in the vicinity of the General Hospital.

During my twelve years' residence in Kuala Lumpur I saw my first case of malaria in a European who contracted the disease in Kuala Lumpur in July of this year. I myself had my first and only attack of malaria this year.

Dr. Fletcher has written a very interesting report on the subject of malaria amongst Europeans in Kuala Lumpur, which was forwarded to Government with recommendations as to dealing with the breeding places of anophelines.

A Commission, consisting of the Health Officer, Chairman of Sanitary Board, District Surgeon, Dr. Fletcher, and Executive Engineer, Kuala Lumpur, was appointed to make detailed recommendations as to dealing with swamps, drainage, clearing of undergrowth, etc.

In connection with the prevalence of malaria in Kuala Lumpur, it must not be forgotten that a large number of infected patients from the various estates were admitted to the hospitals in Kuala Lumpur for treatment and were no doubt the means of infecting a large number of mosquitoes.

BOWEL COMPLAINTS.—Diarrhœa and dysentery accounted for 2,408 cases and 747 deaths.

Comparative table for the last three years is as follows :

Year.	Cases treated.						Deaths.		
1905	1,550	...	471
1906	2,134	...	781
1907	2,408	...	747

PHTHISIS.—Five hundred and twenty-seven cases of phthisis were treated with 253 deaths.

The following table shows the number of cases treated and the number of deaths during the last five years :

Year.	Cases treated.						No. of deaths.		Mortality.	
1903	334	...	177	...	52.99
1904	370	...	201	...	54.32
1905	372	...	188	...	50.53
1906	366	...	164	...	44.80
1907	527	...	253	...	48.00

VENEREAL DISEASE.—Statistics of this disease treated in all hospitals during the last five years is as follows :

Year.	Cases treated.						Deaths.		Mortality.	
1903	847	...	16	...	1.88
1904	751	...	12	...	1.59
1905	660	...	10	...	1.51
1906	942	...	23	...	2.44
1907	1,064	...	28	...	2.63

VACCINATION.—The number of persons vaccinated during the last five years with the percentage of success is shown in this table :

Year.	No. vaccinated.						Successful.		Percentage of success.	
1903	3,236	...	3,176	...	98.14
1904	2,722	...	2,663	...	96.73
1905	3,659	...	3,360	...	91.08
1906	6,726	...	4,383	...	65.00
1907	11,477	...	5,590	...	48.70

It will be observed that the number of persons vaccinated has increased from 6,726 in 1906 to 11,477 this year. This is accounted for by the fact that all Tamil coolies arriving from India and not showing good vaccination marks were vaccinated at Port Swettenham.

Out of the 11,477 vaccinated 5,454 were Tamil coolies vaccinated at Port Swettenham, and out of this number 5,217 were not subsequently seen. The true percentage of success, therefore, after deducting those not seen, was 93.7. The State may be considered as being well vaccinated and safe from any epidemic of small-pox.

OUT-DOOR DEPARTMENT.

The number of persons treated as out-door patients during the last five years is shown below :

Year.									Out-patients.
1903	...	...	...	...	...	...	...	...	36,174
1904	...	...	...	...	...	...	...	...	38,774
1905	...	...	...	...	...	...	...	...	41,558
1906	...	...	...	...	...	...	...	...	42,536
1907	...	...	...	...	...	...	...	...	59,613

EUROPEAN HOSPITAL.

This hospital has been frequently full during the year. The admissions numbered 185 and the total treated 193. The total treated for the last three years was as follows :

1905	...	...	...	...	...	...	...	...	78
1906	...	...	...	...	...	...	...	...	126
1907	...	...	...	...	...	...	...	...	193

Malaria, chiefly amongst the planters, accounted for 51 admissions: most of them came from the Batu Tiga and Klang districts.

ENTERIC FEVER.—Four cases were treated during the year.

DIPHTHERIA.—Two cases of this hitherto unknown disease in Selangor were treated during the year, one of which proved fatal.

That the disease may have existed in the State amongst the natives previously is quite possible; but the fact remains that no Medical Officer has ever hitherto seen a case in Selangor.

CEREBRO-SPINAL FEVER (SPOTTED FEVER).—Two mild cases of this fever in members of the same household were treated during the year. These cases presented all the clinical features of the disease; but, in the absence of a lumbar puncture and the demonstration of the diplococcus meningitoides, the diagnosis is open to criticism.

SPRUE.—Two patients of over fifteen years' continuous residence in the Federated Malay States were admitted suffering from this disease. They were both advanced cases, and one died in the hospital while the other died on his way home. A third case, in the early stage, improved under treatment and was sent home on furlough, and a favourable prognosis is anticipated.

VENEREAL DISEASE.—Twelve cases were admitted during the year from this disease, or its results, as against five the previous year.

DYSENTERY.—It is interesting to note that no case of dysentery was admitted into hospital during the year.

LIVER ABSCESS.—Four cases were treated during the year with one death. One of the cases had multiple abscesses, one of which had burst into the lungs; two abscesses were subsequently opened and drained and the patient made an excellent recovery.

The following major operations were performed during the year. Trephining for abscess of brain, opening of liver abscess, ligature of hæmorrhoids, all of which were successful with the exception of the abscess of brain case which proved fatal. At the *post-mortem* examination thrombosis of the cavernous sinus (left) and hæmorrhage into both lateral ventricles were found.

The average daily number of sick was 8.11.

MORTALITY.—Ten deaths occurred during the year, giving a death-rate of 5.4 per cent. Four of the deaths occurred within 48 hours of admission, and excluding these the death-rate is 3.31 per cent.

STAFF.—Dr. A. Reid performed the duties of House Surgeon during the year. The Matron, Miss Hoffmann, resigned her appointment in April and was replaced by Miss Jenkins, transferred from Pahang. The nursing staff was increased by the appointments of Miss Shaw and Miss Taylor and now consists of the Matron and four Nurses, one of whom, however, is generally engaged in out-door nursing.

The collection for hospital charges amounted to \$8,304.84, as against \$6,745.86 the previous year.

GAOL HOSPITAL.

The health of the prisoners generally has been good during the year.

ADMISSIONS.—The admissions to the gaol hospital numbered 385, and the total treated for the year 393.

The number of prisoners treated in the hospital during the last three years was as follows:

Year.							Prisoners treated.		Deaths.	
1905	...	...	...	...	...	...	300	...	14	
1906	...	...	...	...	...	...	267	...	8	
1907	...	...	...	...	...	...	393	...	8	

Fever, dysentery, beri-beri, abscess, ulcer and wounds accounted for most of the admissions.

FEVER accounted for 111 admissions; 84 of the admissions were amongst Tamils, 33 of whom were estate coolies. It was of a mild type and readily yielded to treatment.

DYSENTERY.—This disease accounted for 33 admissions and was of a mild type.

BERI-BERI accounted for 30 admissions, all Chinese, and two deaths. Out of the 30 admissions only nine were fresh cases contracted in gaol, four of whom had a history of a previous attack. Twenty were admitted with the disease and one was a relapsed case. The prisoners were dieted throughout the year on "uncured" rice.

EYE-INJURIES.—Ten cases of injury to the eye, the result of stone-breaking, were brought under notice during the year. They were all of a slight nature with the exception of one case, a Malay, who received such a severe injury to his eye that he lost the use of it. The use of wire gauze spectacles while stone-breaking would prevent such injuries.

OPIUM-SMOKERS AND MORPHINE-INJECTORS.—Out of 2,315 Chinese prisoners, 568, or 24.7 per cent., were opium-smokers, and out of this number only two required treatment in hospital for the sudden deprivation of opium. The average amount of opium consumed by these 568 prisoners was 1.89 chi per head per day—not a very large quantity. Seventy-three morphine-injectors were admitted during the year, 36 of whom came from Klang, and out of the 29 from Kuala Lumpur most of them contracted the habit in Klang. Almost all of them were sampan-men or wood-cutters.

Daily average sick was 13.62 out of a daily prison strength of 488.35.

MORTALITY.—Eight deaths occurred during the year, giving a death-rate of 2.03 per cent

DISTRICT HOSPITAL, KAJANG.

One thousand seven hundred and forty-three in-door patients were treated at this hospital during the year with 226 deaths, giving a death-rate of 12.96 per cent. This is a marked increase over the figures for last year, which were 1,152 treated, with 60 deaths and a mortality of 5.20 per cent. Of the number treated, 918 were Chinese, 707 Tamils and 68 Malays. The prevalent diseases were fever, diarrhoea, beri-beri, dysentery and phthisis.

The death-rate amongst the Chinese was 16.77 per cent. and amongst the Tamils 9.91 per cent., whilst no deaths occurred amongst the Malays. Fifty-one of the total deaths occurred within 48 hours of admission. Fifty per cent. of the deaths amongst the Tamils resulted from diarrhoea and dysentery.

The out-door patients numbered 2,915 against 1,935, an increase of nearly a 1,000. Of this number 1,037 were Tamils, 980 Chinese, 330 Malays and 285 Europeans.

The average daily number of sick was 74.31, which is more than the accommodation of the hospital allows.

The collections for hospital charges and sale of medicines amounted to \$1,095.36 against \$405.36 for the previous year.

DISTRICT HOSPITAL, SUNGEI BESI.

Three hundred patients were treated at this hospital with 64 deaths and a mortality of 21.33 per cent. All the patients were Chinese with the exception of 11 Tamils and 4 Sikhs.

The prevailing diseases were beri-beri, dysentery, rheumatism, fever and phthisis. Thirty-one cases proved fatal within 48 hours of admission and, excluding these, the death-rate was 14.49 per cent. Beri-beri, dysentery and phthisis accounted for 58 of the deaths. The average daily number of sick was 18.48. The out-door patients at this hospital numbered 632, more than half of whom were Chinese.

Dr. Gerrard, District Surgeon, reports as follows on the hospitals under his charge—viz. The District Hospital, Kuala Lumpur, and Leper Hospital.

DISTRICT HOSPITAL.

The total treated, 6,683, is a record for the hospital since its foundation and exceeds the previous year by 2,853 cases. Number of cases treated during the last 10 years with percentage of deaths :

Year.	Cases treated.	Deaths.	Percentage of deaths.	Percentage of deaths excluding deaths within 24 hours of admission.	No. of out-door patients.
1897	5,976	1,273	21.30	19.74	5,018
1898	3,584	622	17.35	14.78	2,845
1899	3,284	559	17.02	15.32	2,233
1900	5,086	914	17.97	15.80	3,226
1901	5,160	997	19.32	16.53	1,921
1902	4,378	736	16.77	14.52	2,557
1903	4,330	720	16.62	14.71	3,027
1904	4,233	615	14.52	12.58	2,513
1905	5,181	815	16.58	13.18	4,030
1906	3,830	855	15.27	13.20	3,865
1907	6,683	1,042	15.59	12.52	4,557

The death-rate shows a decrease of 0.68 per cent. if the 48-hour cases be excluded, but an increase of 0.32 including these cases. Amongst the deaths it is worthy of note that 25 occurred in cases which were sent to us from the Tung Shin Hospital. During the year 53 cases were passed on to us from the Chinese hospital of which four died within 24 hours of their admission and two within 48 hours. The total admitted from the Chinese hospital was 53, of which 25 died.

The death-rate for the year exclusive of the 48-hour cases (over which we have obviously no control) is the lowest for 10 years.

OUT-DOOR.—The out-door cases show a small increase and amount to 4,557. The total in- and out-door numbered 11,240.

PREVAILING DISEASES.

The order of prevalence of disease was : (1) fever, (2) beri-beri, (3) ulcers, (4) rheumatism, (5) dysentery, (6) anchylostomiasis, (7) syphilis and its effects, (8) phthisis, (9) diarrhoea and, (10) pneumonia.

	Cases.	Deaths.	Percentage.
Fever	1,403	96	6.84
Beri-beri	871	189	21.69
Ulcer	702	8	1.13
Rheumatism	395	—	—
Dysentery	351	165	47.00
Anchylostomiasis	299	83	27.75
Syphilis	298	16	5.36
Diarrhoea	149	42	28.19
Pneumonia	134	88	65.66

REMARKS UPON PREVAILING DISEASES.

In point of numbers fever with 1,403 cases heads the list, the death-rate of 6.84, considering that it includes 44 cases of malarial coma, is satisfactory.

Of the 44 coma cases treated, 15 died giving a death-rate in these cases of 34.08 per cent. which is very satisfactory indeed.

ULCERS.—The Leishman-Donovan body was sought in many cases, but not found. I am, however, convinced that with time at one's disposal this body would be found to be the cause of many of our cases of ulcer.

DYSENTERY.—Three hundred and fifty-one cases, 165 deaths, 47 per cent. The microscopical examination of the excretions of practically all these cases was carried out and in a very large percentage of the cases the entamœba hystolitica was absent.

In Perak I reported upon the success attendant upon the treatment of this disease with anti-dysenteric serum obtained from the Lister Institute, London.

Unless the amœba is found in the motions, I consider that all cases of dysentery occurring in this country should be treated with the serum.

ANCHYLOSTOMIASIS, standing 6th on the list of diseases, is surely gaining ground in this country. All these cases were microscopically diagnosed. Two recognised forms of treatment were contrasted in 89 unselected cases:

1. The thymol treatment;
2. Treatment by the formula eucalyptus, chloroform, and castor oil.

The former series of 43 cases shows a death-rate of 9.30 per cent., while the treatment by the latter shows a death-rate of 32.6 per cent. The evacuations of all anchylostoma cases were examined weekly during the treatment.

SPLENITIS.—Ninety-nine cases with three deaths.

The majority were of malarial origin undoubtedly, but about 20 cases were suspiciously like Kala Azar. I have carefully examined the spleen blood of these suspicious cases, but without any result as far as the Leishman-Donovan body is concerned.

CIRRHOSIS OF THE LIVER.—This disease together with Bright's disease and consumption supplies the ground work for the high mortality at the District Hospital from year to year. The three diseases taken together supplied 192 deaths.

ENTERIC FEVER.—Four cases came under consideration during the year. All four died, I regret to report, all having come in too late as may be seen from the appended analysis:

					Date of admission.				Date of death.	
1	...	...	...	...	22-1-07	...	...	...	30-1-07	
2	...	...	...	...	23-5-07	...	...	...	23-5-07	
3	...	...	...	...	26-5-07	...	...	...	27-5-07	
4	...	...	...	...	24-6-07	...	...	...	24-6-07	

(Contrast this with the four cases of enteric treated at the European Hospital, all of whom recovered. This brings out strikingly the value of early treatment).

PATHOLOGICAL INVESTIGATIONS.

One thousand nine hundred and fifty-nine specimens were examined during the year.

The blood of all fever cases, the sputum of all phthisis cases and the evacuations of almost all the dysentery and diarrhœa cases were examined.

POST-MORTEMS.—One hundred and forty-three post-mortem examinations were made at the District Hospital, and 134 at the Institute, showing a total of 277 examinations for the year.

OPERATIONS.—The most important operation performed by me during the year was one of successful removal of the spleen for rupture.

LEPER HOSPITAL.

During the year 1907, 270 lepers were treated; 60 deaths occurred, showing a mortality of 22.2 per cent.

Dr. Fletcher, District Surgeon, reports as follows on the General Hospital and Lunatic Asylum.

GENERAL HOSPITAL.

The number of patients treated in the General Hospital during the year 1907 was 4,382. The numbers for the last four years are as follows:

Year.						Including operations.			Excluding operations.	
1904	...	...	...	...	...	2,464	...	...	2,242	
1905	...	...	...	...	...	3,120	...	...	2,799	
1906	...	...	...	...	...	3,551	...	...	3,146	
1907	...	...	...	...	...	4,971	...	...	4,382	

There has been a general increase of patients of all nationalities, but especially of Tamils. Half of the total number of patients treated were of this nationality.

A feature in which the General Hospital differs from the District Hospitals in the Native States is the small number of Chinese admitted, less than 25 per cent. of the total. As a rule, while a Chinaman has any money he will not go into hospital. When he has spent all he has he must perforce go to a district hospital, where he is admitted without payment.

The following is a table of the more fatal diseases during 1907 compared with those of the two previous years :

Disease.	Number of deaths.			
	1907.	1906.	1905.	
Malaria	69	29	8	
Dysentery	56	31	16	
Plithisis	22	15	10	
Enteric	10	12	9	
Beri-beri	7	9	8	
Pneumonia	10	—	—	

MALARIA.—The chief difference between the hospital returns of diseases for 1907 and those of previous years lies in the number of cases of malaria admitted to hospital.

In 1907, 1,002 cases of malaria were admitted, 69 cases proving fatal.

In 1906, there were 324 cases with 29 deaths.

In 1905, 238 cases with only 8 deaths.

This increase in malaria began in the autumn of 1906, and the numbers largely consist of coolies who have contracted malaria on new rubber estates, where fresh land is being opened ; the increase is also in part due to an outbreak in the town of Kuala Lumpur.

In previous years malaria in Kuala Lumpur has been confined to the neighbourhood of the river ; for at least twelve years the European quarters have been free. The houses occupied by Europeans are, for the most part, situated on small hills with valleys between. These valleys consist of marshy ground with, as a rule, a small stream running down the middle. Until 1906 these valleys were filled with a dense undergrowth which covered the swamps and streams and hid them from the light thus preventing their becoming a breeding place for the anopheles mosquitoes. It was soon after the clearing of these valleys and in their neighbourhood that malaria broke out towards the end of 1906. On investigation it was discovered by the Government Entomologist that, while anopheles were absent from those streams covered by a thick undergrowth, wherever a sluggish stream or swamp had been uncovered by cleaning, there anopheles were present in large numbers. The outbreak is in short an illustration of the fact, well known to all planters, that clearing jungle brings malaria.

I have already reported on the above outbreak and a Committee appointed by the British Resident, has recently made recommendations to the Government concerning clearing and drainage.

BLOOD EXAMINATION.—Specimens of blood from 3,230 persons were examined for parasites at the General Hospital during the year. Malarial parasites were found in the following proportions:

Malignant tertian	...	...	...	...	...	...	...	598
Mixed and benign tertian	...	...	...	...	...	...	...	343
Quartan	...	...	...	...	...	...	...	16

DYSENTERY.—Two hundred and forty cases of this disease were treated in the hospital during the year with the large mortality of 22 per cent.

In Sikhs and Pathans the disease is nearly always of the amoebic variety and responds readily to treatment ; but if neglected is likely to pass into a condition of sprue.

The Chinese do not come to hospital until the disease is in such an advanced condition that little can be done for them, the intestines being, in parts, almost destroyed by extensive chronic ulceration.

Amongst Tamils the disease is rarely amoebic and treatment by ipecacuanha is useless. As a rule they readily recover from early attacks, leave hospital before they have regained strength, develop another attack, and so on until the intestine is so hopelessly damaged that no amount of medication can cure them.

BERI-BERI.—During the year 116 cases of beri-beri were treated in the General Hospital. For the last eight months of that time all the cases were dieted on “cured” rice.

There were seven deaths, a case mortality of only just over 6 per cent. The patients suffering from beri-beri were drawn chiefly from those nationalities accustomed to eat “uncured” rice—Chinese, Japanese and town Malays.

A few Tamils were admitted suffering from beri-beri, but in each case it was found that “uncured” rice formed their staple diet. As far as I am aware, no Tamil who habitually eats “cured” rice has ever been admitted to the General Hospital suffering from beri-beri. This is a significant fact, as more than 94 per cent. of the Tamils admitted eat “cured” rice, whilst all cases of beri-beri occurring amongst them are drawn from the remaining 6 per cent. who are eaters of “uncured” white rice.

ENTERIC.—There has been a decrease in the number of cases of this disease admitted during 1907. I here give the figures for the last five years :

Year.								No. of cases.	Deaths.	
1903	...	...	...	...	...	...	...	6	...	2
1904	...	...	...	...	...	...	...	14	...	4
1905	...	...	...	...	...	...	...	38	...	9
1906	...	...	...	...	...	...	...	49	...	12
1907	...	...	...	...	...	...	...	24	...	10

FEMALE WARD.

Eight hundred and ninety-five patients were treated in the ward during the year, an increase of 327 on 1906. The following shows the daily average for the last four years :

Year.								Daily average.	Percentage of deaths.	
1904	...	...	...	...	...	...	...	18.6	...	—
1905	...	...	...	...	...	...	...	23.7	...	—
1906	...	...	...	...	...	...	...	31.9	...	11.9
1907	...	...	...	...	...	...	...	49.28	...	10.2

The nationalities treated were :

Tamils	...	...	...	...	...	...	...	...	...	535
Japanese...	...	...	...	...	...	...	...	...	...	167
Chinese	...	...	...	...	...	...	...	...	...	127
Others	...	...	...	...	...	...	...	...	...	66

OPERATIONS.—Five hundred and ninety-one operations were carried out under anæsthetics.

OUT-PATIENTS.

At General Hospital dispensary	...	...	...	...	...	...	...	...	13,708
Surgical ward	...	...	...	...	...	...	...	...	1,936
Police ward	...	...	...	...	...	...	...	...	5,880
Total	...	...	...	...	...	...	...	...	21,524

LUNATIC ASYLUM.

There were 270 patients treated in the asylum during the year. The numbers for the last four years are as follows :

Year.								No. of patients.	
1904	193
1905	219
1906	216
1907	270

There were 60 deaths during the year, giving a percentage to total treated of 22.22 per cent.

The following shows the percentage of death-rate for the last four years :

Year.								Percentage of death-rate.	
1904	17.09
1905	25.11
1906	24.07
1907	22.22

There were 27 deaths from dysentery :

Year.								Deaths from dysentery.	
1904	19
1905	8
1906	22
1907	27

The prevalence of this disease is not due to the drinking water supply ; this is the same as that for the town of Kuala Lumpur.

Dr. Harrison, District Surgeon, who took charge of the Ulu Selangor district on 7th November, 1907, reports as follows on the hospitals under his care.

The total number of cases treated throughout the district during the year shows an increase in both in- and out-patients over that of the preceding year.

NUMBER OF CASES TREATED.

				1907.		1906.	
				In-door.	Out-door.	In-door.	Out-door.
Kuala Kubu	...	...	...	2,639	9,400	1,883	6,621
Serendah	...	...	...	1,233	4,551	864	2,805
Rawang	...	...	...	1,583	2,922	1,069	1,636
Rasa	...	...	...	...	3,951	...	3,114
Sungei Choh	...	...	...	...	262	...	...
Total				5,455	21,086	3,816	14,176
Grand total				26,541		17,992	

or an increase of 8,549 patients, not including repetitions. A new dispensary was opened at Sungei Choh on the 3rd November, 1907.

DEATH-RATE.

				1907.	1906.
Kuala Kubu	...	...	...	15.64	17.95
Serendah	...	...	...	16.13	13.65
Rawang	...	...	...	7.77	8.88

giving a death-rate for the whole of the district of 14.47. There is an increase in the death-rate in Serendah hospital which is due to the large number of cases admitted in an advanced stage of disease as shown by the number of deaths within 48 hours, which are exceedingly numerous in all hospitals. This is, I am of opinion, due to the fact that most of the Chinese coolies will not come to the hospital until they are practically moribund. If these are deducted a net mortality, which compares favourably with the figures of the preceding year, is shown :

				1907.		1906.	
Kuala Kubu	...	...	...	134	10.51	117	11.70
Serendah	...	...	...	58	11.43	26	10.64
Rawang	...	...	...	32	5.74	19	7.10

The number of absconding patients shows a slight increase :

				1907.	1906.
Kuala Kubu	...	...	...	169	177
Serendah	...	...	...	79	33
Rawang	...	...	...	28	50
Total				274	260

CASE MORTALITY OF PRINCIPAL DISEASES.

				1907.		1906.	
				Cases.	Mortality.	Cases.	Mortality.
Beri-beri	...	...	...	458	18.72	135	37.77
Diarrhoea	...	...	...	425	38.11	235	38.72
Dysentery	...	...	...	237	40.08	71	50.70
Phthisis	...	...	...	106	58.48	35	62.85
Malarial fever	...	...	...	1,812	6.64	—	—

The 1906 figures apparently apply to Kuala Kubu Hospital only.

EPIDEMICS.

During the months of April and May an outbreak of chicken-pox occurred at Rasa and Kuala Kubu. Six cases were admitted to the hospital and successfully treated.

KLANG HOSPITAL.

The following comparative table shows the amount of work done at the hospital during the year :

Year.					In-door.			Mortality excluding deaths within 24 hours of admission.	Out-door.	Total.
					Total treated.	Deaths.	Mortality.			
1904	...	...	...	...	1,394	141	10.11	8.10	3,476	4,870
1905	...	...	...	...	1,785	198	11.09	8.68	2,522	4,307
1906	...	...	...	...	2,875	498	17.32	15.16	2,698	5,573
1907	...	...	...	...	3,977	641	16.11	13.05	3,843	7,820

It will be observed there was an increase of 1,102 in-door and 1,145 out-door patients as compared with the previous year.

The following table shows the prevalent diseases and their respective mortalities for the last two years :

Disease.	No. treated.				No. of deaths.				Mortality.		
	1906.		1907.		1906.		1907.		1906.	1907.	
Malaria ...	789	...	1,951	...	147	...	312	...	18.81	...	15.98
Diarrhoea ...	265	...	233	...	146	...	117	...	55.09	...	50.21
Dysentery	144	...	126	...	71	...	68	...	49.30	...	53.96
Ulcer ...	389	...	385	...	4	...	5	...	1.02	...	1.29
Phthisis ...	48	...	38	...	20	...	15	...	41.06	...	39.47
Pneumonia	60	...	78	...	24	...	40	...	40.00	...	51.28

KUALA SELANGOR HOSPITAL.

Seven hundred and sixty-seven patients were treated in this hospital with 116 deaths and a mortality of 15.12 per cent. Twenty-three deaths occurred within 48 hours of admission, and deducting these the death-rate was 12.5 per cent. The average daily number of sick was 33. This hospital was overcrowded throughout the year.

Out of 767 patients treated 653 were Tamils, and out of the 116 deaths 103 were amongst the Tamils.

The out-door patients numbered 1,635, and of these 853 were Tamils, 365 Malays and 322 Chinese.

The following comparative table shows the work done during the last four years :

Year.						In-door.		Out-door.
						Total treated.	Mortality.	Total treated.
1904	...	...	...	...	...	184	4.62	1,045
1905	...	...	...	...	...	281	5.33	1,542
1906	...	...	...	...	...	467	8.77	1,396
1907	...	...	...	...	...	767	15.12	1,635

There is an increase of 300 over the previous year, due chiefly to the increase in the estate population.

KUALA LANGAT HOSPITAL.

Six hundred and nine patients were treated with 41 deaths and a mortality of 6.73 per cent. Sixteen deaths occurred within 48 hours of admission, and deducting these the death-rate was 4.21 per cent. The average daily number of sick was 24.76.

Out of the 609 patients treated 434 were Tamils and out of the 41 deaths 28 were amongst Tamils.

The out-door patients numbered 1,356, and out of this number 533 were Tamils, 506 Malays, 129 Chinese.

The prevailing diseases were fever 191, diarrhoea 40 and dysentery 39.

The subjoined table shows the number of patients treated during the last four years :

Year.	In-door.		Out-door.
	Total treated.	Mortality.	Total treated.
1904	192	5.20	1,451
1905	345	4.34	1,446
1906	381	6.29	1,280
1907	609	6.73	1,356

It will be observed that, although there has been a considerable increase in the number of in-door patients during the last two years, there has been a diminution in the number of out-door cases.

JERAM HOSPITAL.

Three hundred and ninety-two patients were treated with 58 deaths and a mortality of 14.79 per cent. The average daily sick was 55.43.

Out of the total number of patients treated, the Tamils again head the list with 238 and Chinese 120. The prevailing diseases were beri-beri 112, dysentery 61 and fever 65.

ESTATE HOSPITALS.

No estate hospitals were completed and occupied at the end of the year. Hospitals on the following estates were in course of construction :

- | | |
|-------------------------|--------------------|
| 1. West Country, Kajang | 5. Batu Tiga |
| 2. Wardieburn | 6. Bukit Raja |
| 3. Lowlands | 7. Bukit Rotan. |
| 4. Jugra | 8. Petaling Estate |

Hospitals on the following estates are still to be erected :

- | | |
|------------------------------|---------------|
| 1. Kapar | 3. Kent |
| 2. Berjuntai, Kuala Selangor | 4. Batu Caves |

With the exception of the hospital on Kent Estate, all the other hospitals are combined estate hospitals.

VETERINARY BRANCH.

Mr. Symonds, Acting Veterinary Surgeon, reports as follows on the work done by the Veterinary Department during the year.

The following outbreaks of disease amongst animals were dealt with :

FOOT-AND-MOUTH DISEASE.—This disease was introduced from Negri Sembilan into the Ulu Langat district during January and gradually spread to all districts in the State. During June the disease returned from Pahang to Kuala Kubu. It was not until July that the epidemic finally ceased. During the year 1,932 bullocks and 31 buffaloes were attacked. The Siam bullocks suffered most severely, and some of these animals developed a second attack after recovering from the first attack. The Indian bullocks and Malay buffaloes usually developed a very mild type of the disease, in some cases a few pustules round the feet without oral manifestations being the only symptoms discernible. One hundred and twenty-six cases occurred in the Quarantine Station at Port Swettenham amongst cattle brought from other ports. The total number of deaths due directly or indirectly to the disease was slightly over one per cent.

SURRA.—This disease was found during September in a large gharri stable at Klang, three ponies being infected. The disease was detected in the early stages and did not spread. It had occurred in this stable during the same month the previous year. A pony imported from Borneo was also found to be infected. In cattle sporadic cases of surra were found in Kuala Lumpur, Klang and also in Seremban. Ten cases in all occurred, in four of which the diagnosis was made by finding the parasites in blood films ; in the other cases animal inoculation was necessary to prove the malady. These cattle were all emaciated animals and unfit for work.

GLANDERS.—Two cases of glanders occurred in the Ulu Langat district during July in gharri ponies.

RINDERPEST.—During November two cases of this disease were found in a shipment of two Indian cows and of calves at Port Swettenham. Seven cases eventually developed, but the disease was of a mild type and one death only resulted.

RABIES.—One suspected case occurred in a dog sent from the Klang district to Kuala Lumpur.

THE VETERINARY POLICE.—This force did good work during the year. A large amount of time was given to work in the out-stations. Four hundred and fifteen cases were brought before the Magistrates and 351 convictions obtained, the total fines collected during the year amounting to \$3,030.50. The majority of the cases were for breaches of the Quarantine Regulations or for offences under the Prevention of Cruelty to Animals Enactment.

VISITS TO OUT-STATIONS.—Ninety-four visits were paid to the various out-stations in the State, in connection with outbreaks of disease. In addition, 10 visits were paid to Negri Sembilan.

ABBATTOIRS.—Forty-two inspections of the cattle and sheep slaughter houses were made during the year.

QUARANTINE STATIONS.

PORT SWETTENHAM.—The following table shows the number of animals imported through Port Swettenham :

Cattle ...	...	...	...	...	...	...	...	...	4,622
Horses ...	...	...	...	...	...	...	...	...	296
Sheep and Goats	...	...	...	...	...	...	...	...	5,173
Pigs ...	...	...	...	...	...	...	...	...	5,594
Total ...									15,685

The isolation shed in connection with this quarantine station was started during the year and is now nearly completed.

KUALA LUMPUR.—The quarantine area at Bukit Sintol was used to relieve the congestion at Port Swettenham, and also when foot-and-mouth disease was prevalent.

The Veterinary Inspectors both worked well.

EXAMINATION OF PETROLEUM.

Testing of petroleum at Port Swettenham was carried out under the supervision of Senior District Surgeon Dr. Watson. The total quantity imported was 2,400,812 gallons, of which 57,268 gallons were described as dangerous petroleum. Fifteen samples were tested during the year.

REVENUE.

The amount collected by the department for hospital fees, etc., was \$33,485.23, against \$20,029.36 in 1906.

GENERAL.

Most of the hospitals were taxed to their utmost capacity during the year and some, especially the General and District Hospitals, Kuala Lumpur and Klang, and Kuala Selangor Hospitals were much overcrowded.

Changes in the staff took place as follows: Dr. Delmege, Kuala Kubu, and Dr. Harrison, Pahang, exchanged places in November, and Mr. Melchizedek, Apothecary, Rawang, and Assistant Surgeon, Mr. Gupta, Negri Sembilan, exchanged places in September. One new Assistant Surgeon, one Apothecary, one 2nd Grade Dresser and eight Probationers were appointed and taken on the staff. One Apothecary and one Dresser were dismissed the service.

The want of a second Surgeon in the Coast district was much felt during the outbreak of cholera on Lapan Utan Estate, Kuala Selangor, when the services of Dr. Watson were needed there. As a temporary measure Dr. Jacques, a private practitioner, was appointed to look after the Klang hospital and district during Dr. Watson's absence.

A. J. McCLOSKEY,
Acting State Surgeon, Selangor.

